



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Adress: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,090	03/06/2002	Hiroaki Furuyama	B422-182	8519
26272	7590	08/04/2009	EXAMINER	
COWAN LIEBOWITZ & LATMAN P.C. JOHN J TORRENTE 1133 AVE OF THE AMERICAS NEW YORK, NY 10036			ATALA, JAMIE JO	
ART UNIT	PAPER NUMBER			
		2621		
MAIL DATE	DELIVERY MODE			
08/04/2009	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/092,090	Applicant(s) FURUYAMA, HIROAKI
	Examiner JAMIE JO VENT ATALA	Art Unit 2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

Status

- 1) Responsive to communication(s) filed on 01 May 2009.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-5,7-9 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-5,7-9 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imai et al (US 6,771,882) in view of Hori (US 5,991,504) in further view of Fisher et al (US 7,133,068) in further view of Morita et al (US 6,584,463).

[claim 1]

In regard to Claim 1, Imai discloses a recording apparatus comprising:

- Recording mode setting unit configured to set a recording mode of the recording apparatus between the first recording mode and the second recording mode (Column 1 Lines 33-60 describes the recording of digital video data wherein the moving image data is recorded onto the recording medium in various modes as further stated in Column 10 Lines 13-51. Furthermore, it is noted that still

reproduction can be achieved at this time by having a frame repeated continuously for purposes of recording a still frame. The digital data being recorded is processed through the SDL recording mode as described in Column 2 Lines 19-67);

- recording the image data of one frame in m number of tracks (m is an integer greater than n) on the magnetic tape in a second recording mode for recoding moving image data and still image data each having a second information quantity larger than the first information quantity per one frame (The digital data is recorded using a second mode of SD as described in Column 6 Lines 1-22. The SD recording mode allows for larger quantity per unit time as the digital data of a frame is recorded on ten tracks compared to SDL two frames are recorded on ten tracks as described in Column 1 Lines 33-58. Thereby the SD mode provides a larger quantity per unit time on the recording medium);
- Instruction means for instructing recording of a still image (Column 10 Lines 35-67 discusses still reproduction of one frame and thereby allowing the recording of the one frame into a still image appearance); however, fails to disclose
 - Imaging unit configured to image an object and output moving image data
 - Memory configured to store image data of one frame of moving image data output from the image means

- Compressing unit configured to compress information quantity of moving image data output from said image means and information quantity of the image data of one frame stored in memory
- Recording unit configured to move a magnetic tape and record the moving image data output from the compressing unit and repeatedly record the image data of the same one frame output from the compression unit as still image data in a plurality of tracks formed on the magnetic tape, wherein the recording unit records the image data of one frame in an n number of tracks (n is an integer of 1 or more) on the magnetic tape in a first recording mode for recording moving image data and still image data each having a first information quantity per one frame and
- Control unit configured to control the recording means so as to start recording on the magnetic medium still image data of the same one frame in response to a recording instruction of the still image by said instruction provided by the instruction unit and to stop recording the still image data of the one frame a predetermined recording period after the recording was started
- Wherein said control unit changes the predetermined recording period for recording the still image data in accordance with recording mode setting unit

- Wherein the control unit changes the predetermined period for recording the still image data to a first predetermined period if the first recording mode is set by the recording mode setting unit and changes the predetermined recording period to a second predetermined period shorter than the first predetermined period is set by the recording mode setting unit

Hori teaches a system of for compressing and recording still images comprising:

- Imaging unit configured to image an object and output moving image data (Figure 1 input allows for information from a video camera (Column 3 Lines 28-48);
- Memory configured to store image data of one frame of moving image data output from the image means (Figure 1 shows the input and storage of moving image data);
- Compressing unit configured to compress information quantity of moving image data output from said image means and information quantity of the image data of one frame stored in memory (Column 3 Lines 28+ through Column 4 Lines 1-43 describes the storing and compressing of data);
- Recording means for recording the moving image data output from compressing means and repeatedly recording the image data of one frame output from said compression means as still image data (Figure 1

shows the recording and describes the output in Column 3 Lines 28+ through Column 4 Lines 1-43).

- Wherein said control unit changes the predetermined recording period for recording the still image data in accordance with recording mode setting unit (Figure 3 shows the recording instruction of a still image data as described in Column 4 Lines 64+ through Column 5 Lines 1-65. Furthermore, a predetermined recording period is based on the recording of the still picture image as described in Column 5 Lines 10-23)

It is taught by Hori to provide a control means for recording still image data based on a predetermined time to provide effective memory management between still and moving video in various modes as described in Column 6 Lines 30-59. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use the recording mode system of still and moving images, as disclosed by Imai, and further teach the system to incorporate control of recording the still images based on a predetermined time, as taught by Hori, in order to allow for proper and efficient memory management of video images.

Fisher et al teaches a system wherein still images are processed and utilized from moving images further comprising:

- Wherein said control means changes the predetermined recording period for recording the still image data between a first predetermined when the first recording mode setting means, and changes the predetermined

recording period to a second predetermined period shorter than the first predetermined period when the second recording mode is set (Column 6 Lines 64+ through Column 7 Lines 1-11 describes the recording of still frames based upon the extraction of still frame from video data at a correct time interval. Furthermore, it is stated and shown in Figure 7 a second predetermined time interval for recording still frames wherein the still frames provide an overlapping region between each frame as the predetermined time period is shorter and thus provides overlapping of still frames as described in Column 7 Lines 12-67 through Column 8 Lines 47).

It is thereby taught by Fisher et al to provide various time intervals for recording still pictures. The various time intervals containing a second shorter time interval for producing adjacent still frames to allow for greater overlap regions thus generate improved photographic detail (Column 8 Lines 39-48). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use recording mode system of still and moving pictures with control recordings of still pictures at predetermined time periods, as disclosed by Imai in view of Hori, and further teach the system to provide various predetermined time periods for the still images to provide proper recording of the still images, as taught by Fisher et al, in order to provide for improved video images.

Furthermore, Morita discloses a system for producing still images from a recording medium further comprising:

- Wherein said control unit changes the predetermined recording period for recording the still image data in accordance with recording mode setting unit (Figure 5 shows the control unit changing predetermined recording periods)
- Wherein the control unit changes the predetermined period for recording the still image data to a first predetermined period if the first recording mode is set by the recording mode setting unit and changes the predetermined recording period to a second predetermined period shorter than the first predetermined period if the second recording mode is set by the recording mode setting unit (Column 7 Lines 13+ describes the changing of the predetermined recording period to a recording mode with a shorter predetermined recording period).

It is taught by Morita to produce a system with still image pictures to properly display the images at predetermined intervals. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use recording mode system of still and moving pictures with control recordings of still pictures at predetermined time periods, as disclosed by Imai in view of Hori in further view of Fisher et al, and further teach the system to provide various control unit to change predetermined recording period, as taught by Morita et al, in order to provide for improved video images.

[claim 2]

Regarding Claim 2, Imai discloses a recording apparatus; however, fails to disclose

- wherein the control means controls said recording means to record detection data for detecting the still image data recorded on the recording medium with the still image data in response to the recording instruction of the still image at a predetermined time defined to each of the first and second recording modes.

Hori additionally teaches an apparatus for controlling compression modes comprising:

- wherein the control means controls said recording means to record detection data for detecting the still image data recorded on the recording medium with the still image data in response to the recording instruction of the still image at a predetermined time defined to each of the first and second recording modes (Column 5 lines 47+ through Column 6 Lines 1-22 describes the detecting of still images recorded on the recording medium and is determined based on predetermined time as described in Column 5 Lines 10-22).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to use the recording mode system of still and moving images, as disclosed by Imai, and further teach the system to detect still images, as taught by Hori, providing the motivation as previously discussed in Claim 1.

[claim 3]

Regarding Claim 3, Imai discloses an apparatus wherein the first recording mode is set by said recording mode setting means and substantially positioned in the middle of the

first recording (Column 1 Lines 33-57 describes the SD and SDL modes that are set based on the recording mode. Furthermore, the information being placed in the middle of the first recording is further discussed in Column 2 Lines 6-56); however, fails to disclose

- o control means controls said recording means to record the detection data by multiplexing the detection data on the image data for a period shorter than, the substantially positioned in the middle of the first recording

Hori teaches a system wherein information is multiplexed onto the data including compression and recording mode information (Column 3 Lines 35-46) and further comprising:

- o control means controls said recording means to record the detection data by multiplexing the detection data on the image data for a period shorter than, (Column 5 lines 47+ through Column 6 Lines 1-22 describes the detecting of still images recorded on the recording medium based on predetermined timing. Furthermore, as seen in Figure 2 the recording of image data is shown based on the compression modes).

It is taught by Hori to provide a control means for recording information that is detected to provide an effective detection between still and moving video in various modes as described in Column 6 Lines 30-59. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use the recording mode system of still and moving images, as disclosed by Imai, and further teach the system to

incorporate control means for controlling the recording of detection data, as taught by Hori, in order to allow for proper and efficient detection of video images.

[claim 4]

Regarding Claim 4, Imai discloses an apparatus wherein the second recording mode is set by said recording mode setting means (Column 1 Lines 33-57 describes the SD and SDL modes that are set based on the recording mode and identified by the front and rear frames as described in Column 6 Lines 38-50); however, fails to disclose

- o said control means controls said recording means to record the detection data by multiplexing the detection data on the still image data from a head portion of the second recording period.

Hori teaches a recording apparatus further comprising:

- o said control means controls said recording means to record the detection data by multiplexing the detection data on the still image data from a head portion of the second recording period (Column 5 lines 47+ through Column 6 Lines 1-22 describes the detecting of still images recorded on the recording medium based on predetermined timing. Additionally, as described the data is processed based on detection of data as it enters the system. The compression modes are then set according to the inputted data from the head portion of the image data of that recording

period. As seen in Figure 2 the head portion 5 allows the system information for further processing).

It is taught by Hori to provide a control means for recording information that is detected to provide an effective detection between still and moving video in various modes as described in Column 6 Lines 30-59. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use the recording mode system of still and moving images, as disclosed by Imai, and further teach the system to incorporate control means for controlling the recording of detection data, as taught by Hori, in order to allow for proper and efficient detection of video images.

[claim 5]

Regarding Claim 5, Imai discloses an apparatus wherein recording means records the image data of one frame in an n number of tracks (n is an integer of 1 or more) on the recording medium on the first recording mode, and the image data of one frame in an 2xn number of tracks on the recording medium on the second recording mode (Figure 2 shows two recording modes wherein the recording of image data having n=5 tracks providing an SDL recording mode. The second recording mode of 10 tracks (2xn; n=5) providing a second recording mode of SD format. The various recording modes are described as further described in Column 2 Lines 5-56).

[claim 7]

Regarding Claim 7, Imai discloses an apparatus wherein the second recording mode is set according to SD specifications defined by HD Digital VCR Council, and the first

recording mode is set according to SD High Compression Specifications defined by HD Digital VCR Council (Column 1 Lines 33-59 describe the SD and SDL modes and specifications in a digital VCR environment); however, fail to disclose it is set according to the SD High Compression Specifications defined by HD Digital VCR Council. Although, the references does not disclose the specifications according to the HD Digital VCR Council it would be obvious to incorporate the specifications (official notice). The incorporation of the SD specifications according to the HD Digital VCR Council would allow the data to comply with digital standards allowing the data to be playable on many digital mediums.

[claim 8]

Regarding Claim 8, Imai discloses an apparatus wherein detection is identification codes (Column 7 Lines 50-64 describes identification codes used for detection between various tracks and data. Furthermore, as the system records still and moving pictures it is well known in the art that PPID, FC, ST, SC signals are all automatically recorded during the recording of still and moving pictures); however, fails to disclose the detection data is a photo picture ID (PPID) defined by HD Digital VCR Council. Although, the references does not disclose PPID as defined by HD Digital VCR Council it would be obvious to incorporate the PPID as defined by the council (official notice). The incorporation of the specifications according to the HD Digital VCR Council would allow the data to comply with digital standards allowing the data to be playable on many digital mediums.

[claim 9]

Regarding Claim 9 as discussed in Claim 1, and Imai further discloses the following:

- a first recording mode for recording moving and still image data each having a first information quantity per unit time on a recording medium (Column 1 Lines 33-60 describes the recording of digital video data wherein the moving image data is recorded onto the recording medium in various modes as stated in Column 10 Lines 13-51. Furthermore, it is noted that still reproduction can be achieved at this time by having a frame repeated continuously for purposes of recording a still frame. The digital data being recorded is processed through the SDL recording mode as described in Column 2 Lines 19-67);
- A second recording mode for recording moving and still image data each having a second information quantity larger than the first information quantity per unit time on the recording medium (The digital data is recorded using a second mode of SD as described in Column 6 Lines 1-22. The SD recording mode allows for larger quantity per unit time as the digital data of a frame is recorded on ten tracks compared to SDL two frames are recorded on ten tracks as described in Column 1 Lines 33-58. Thereby the SD mode provides a larger quantity per unit time on the recording medium);
- A mode switch for setting the first and second recording modes (Column 11 Lines 50-67 describes the mode switching between the two recording modes of

SD and SDL. The recording modes are evaluated based on the data being processed then the appropriate recording mode is set); however, fails to disclose

- Wherein said control means changes the predetermined recording period for recording the still image data from the start of recording still image data to the stopping of recording the still image data is between a first predetermined period for recording the still image data and a second predetermined period shorter than the first predetermined period for recording the still image data in accordance with the recording mode when the first recording mode is set by said mode switch, said recording apparatus still image data with detection data for detecting the still image data recorded on the recording medium in response to an instruction of still image recording and stops at the first predetermined period after the recording was started and when the second recording mode is set said recording apparatus starts recording still image data when the detection data on the recording medium in response to the instruction of still image recording and stops recording at the second predetermined period after the recording was started.

Fisher et al teaches a system wherein still images are processed and utilized from moving images further comprising:

- Wherein said control means changes the predetermined recording period for recording the still image data between a first predetermined when the

first recording mode setting means, and changes the predetermined recording period to a second predetermined period shorter than the first predetermined period when the second recording mode is set (Column 6 Lines 64+ through Column 7 Lines 1-11 describes the recording of still frames based upon the extraction of still frame from video data at a correct time interval. Furthermore, it is stated and shown in Figure 7 a second predetermined time interval for recording still frames wherein the still frames provide an overlapping region between each frame as the predetermined time period is shorter and thus provides overlapping of still frames as described in Column 7 Lines 12-67 through Column 8 Lines 47).

It is thereby taught by Fisher et al to provide various time intervals for recording still pictures. The various time intervals containing a second shorter time interval for producing adjacent still frames to allow for greater overlap regions thus generate improved photographic detail (Column 8 Lines 39-48). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use recording mode system of still and moving pictures with control recordings of still pictures at predetermined time periods, as disclosed by Imai, and further teach the system to provide various predetermined time periods for the still images to provide proper recording of the still images, as taught by Fisher et al, in order to provide for improved video images.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMIE JO VENT ATALA whose telephone number is (571)272-7384. The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAMIE JO VENT/
Primary Examiner, Art Unit 2621